AMENDMENTS

In the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A local dry etching method for flattening a semiconductor wafer by removing unevenness from ~~the wafer~~ a surface of the wafer using a nozzle for applying a flow of activated species gas to the ~~surface and scanning the surface at a controlled relative speed, wherein a silicon oxide film formed on the surface is previously removed~~ surface of the wafer, the method comprising:

providing a semiconductor wafer having a silicon oxide film formed on a surface thereof;

removing the silicon oxide film so that silicon is exposed on the surface of the semiconductor wafer; and

etching the exposed silicon by moving the nozzle applying the activated species gas at a controlled speed relative to the semiconductor wafer.

2. (Currently Amended) A local dry etching method according to claim 1, wherein [[said]] the silicon oxide film is removed by moving a nozzle for applying a flow of activated species gas to the film ~~and scanning the film~~ at a ~~controlled relative~~ speed relative to the semiconductor wafer.

3. (Currently Amended) A local dry etching method according to claim 2, wherein the removal of [[said]] the silicon oxide film and the ~~removal of said unevenness~~ etching of the exposed silicon are carried out with [[the]] a same nozzle.

4. (Currently Amended) A local dry etching method according to claim 3, wherein the removal of ~~said unevenness is~~ the silicon oxide film and the etching of the exposed silicon are carried out in [[the]] a vacuum chamber ~~right after the removal of said silicon oxide film in the same chamber while~~ without breaking a vacuum ~~is maintained~~ of the chamber.

5. (Currently Amended) A local dry etching method according to claim 4, wherein ~~the removal of said silicon oxide film is carried out by scanning the nozzle at a~~ the speed for moving the nozzle for removing the silicon oxide film is constant ~~speed~~, and the speed for moving the

nozzle for etching the exposed silicon is variable so as to correspond to local unevenness of the semiconductor wafer.

6. (Currently Amended) A local dry etching method according to claim [[5]] 4, wherein ~~the removal of said silicon oxide film is carried out by making the etching profile of the activated species gas and the scan~~ the nozzle is moved by a pitch ~~wider than when said unevenness is removed~~, and the pitch for removing the silicon oxide film is larger than the pitch for etching the exposed silicon.

7. (Currently Amended) A local dry etching method according to claim [[6]] 4, wherein an etching profile of the flow of the activated species gas for removing the silicon oxide film is wider than the etching profile of the flow of the activated species gas for etching the exposed silicon ~~the width of said etching profile is adjusted~~ by adjusting a flow-in rate of the activated species gas through [[said]] the nozzle and a flow-out rate of the activated species gas through a duct surrounding [[said]] the nozzle.

8. (Currently Amended) A local dry etching method according to claim [[7]] 1, wherein [[said]] the activated species gas ~~includes~~ comprises fluorine radicals.

9. (Withdrawn) A local dry etching apparatus comprising:

a vacuum chamber;

a vacuum pump for pumping gas from said vacuum chamber;

a stage, provided in said vacuum chamber, for mounting and fixing a semiconductor wafer;

a plasma generator for generating activated species gas using discharge of fluorine compound gas;

a nozzle for applying a flow of the activated gas generated by said plasma generator to the surface of the semiconductor wafer on said stage;

a duct which is connected to said vacuum pump and provided to surround said nozzle and through which the exhaust gas in the vacuum chamber passes;

an exhaust gas pumping rate control unit, provided between said vacuum pump and said vacuum chamber to control the etching profile of the activated species gas applied from said nozzle, for controlling the pumping rate of gas exhausted by the vacuum pump;

an X-Y drive unit which can move said nozzle in two directions along the surface of the semiconductor wafer on said stage relative to each other; and

a control unit for controlling said X-Y drive unit.